



## **NOAA Research in Alabama**



### **AL-1 (Personnel in Mobile and Dauphin Island - serves all of Alabama coast)**

#### **National Sea Grant College Program**

#### **Mississippi-Alabama Sea Grant Consortium**

The Mississippi-Alabama Sea Grant Consortium (MASGC) supports scientific research, education, and outreach efforts that foster the conservation, sustainable development, and use of oceanic and coastal resources for the benefit of both the economy and the environment in Mississippi and Alabama. MASGC is part of a network of 30 Sea Grant programs in all U.S. coastal and Great Lakes states and Puerto Rico. Recent research projects have targeted marine biotechnology and industrial ecology, shrimp and oyster development and restoration, open ocean aquaculture, sustainable fisheries, coastal ecosystems and habitats, and marine education and outreach. Citizens, industry and policy makers are kept informed on issues related to commercial and recreational fishing, seafood processing, watershed management, water quality, aquaculture and aquatic nuisance species through the Sea Grant extension programs in both states, and MASGC's communications program. MASGC's educational efforts have been strong in Alabama through programs involving the Dauphin Island Sea Lab, the Lloyd Scott Environmental Education Center, and the Alma Bryant High School Aquaculture Program. The Alabama members that are currently part of MASGC include Auburn University, Dauphin Island Sea Lab, University of Alabama, University of Alabama at Birmingham, and the University of South Alabama. In FY 2001, Mississippi-Alabama Sea Grant projects received funding of approximately \$1.6 million from the National Sea Grant College Program. For more information, please visit <http://www.masgc.org>

### **AL-1 (coastal waters)**

#### **National Undersea Research Program**

#### **National Undersea Research Center for the Southeastern U.S. and Gulf of Mexico**

The National Undersea Research Center for the Southeastern U.S. and Gulf of Mexico is located at the University of North Carolina at Wilmington. It is one of six regional centers supported by the National Undersea Research Program (NURP). The center supports and conducts undersea research throughout the South Atlantic Bight (NC to FL), Florida Keys, and Gulf of Mexico. The Center provides research support for in situ oceanography conducted by divers, submersibles and remotely operated vehicles. Key research includes studies of the health of coastal reef systems in the Florida Keys, studies of marine fisheries population dynamics/habitat associations/recruitment processes, support of research on lithospheric resources and processes (including those related to offshore oil drilling, gas hydrates, climate change, sea level history, and sea floor evolution), and carbon cycling as it concerns the air-sea interaction in global warming. In FY 2001 the Center at Wilmington received funding of \$2.64 million. For more information please visit <http://www.uncwil.edu/nurc/>

## **AL-1 (Alabama coast)**

### **Atlantic Oceanographic and Meteorological Laboratory Hurricane Research**

The Atlantic Oceanographic and Meteorological Laboratory's Hurricane Research Division (HRD) conducts an annual field program during peak hurricane season, flying NOAA's two WP-3D Hurricane Hunter aircraft into all hurricanes threatening US coastlines. Dropsondes and onboard radar are used to profile hurricane winds and storm structure. HRD scientists then transmit real-time information to the National Hurricane Center (NHC) at the Tropical Prediction Center, one of NOAA's National Centers for Environmental Prediction. An HRD workstation at NHC processes the aircraft data to generate products for hurricane specialists. NOAA's G-IV jet is also used in the field program to profile wind currents surrounding and influencing the storm tracks. HRD scientists incorporate these and other data to create wind analyses of hurricanes. These analyses are crucial in identifying regions of strong winds in the storm and are distributed to local emergency managers for hurricane warning and evacuation determinations. HRD scientists are also studying the hurricane winds before and after landfall to help determine expected wind impacts as a hurricane moves over land. For more information please visit <http://www.aoml.noaa.gov/hrd/index.html>

## **AL-1 through 7 (Statewide)**

### **Climate and Global Change Program**

NOAA is responsible for providing climate information to the Nation in order to prepare and protect climate sensitive sectors of society and the economy. To carry out this mission, NOAA's Climate and Global Change Program conducts focused scientific research to understand and predict natural variations of climate. The program is comprised of a number of research elements, each focusing on a specific aspect of climate variability. Taken together, this research contributes to improved predictions and assessments of the effects of climate variability and change on different environments over a continuum of time scales from season to season, year to year, and over the course of a decade and beyond. This research is accomplished through the strong support of the academic and private sectors, as well as NOAA and other federal laboratories. In FY 2001, NOAA's Climate and Global Change Program provided approximately \$206,200 in support of climate research in the state of Alabama. For more information please visit <http://www.ogp.noaa.gov>

## **AL-5 (Huntsville)**

### **Air Resources Laboratory Health of the Atmosphere Program**

High levels of ozone close to the Earth's surface affect human health and economy in rural and urban America by causing respiratory problems and damaging crops and forests. NOAA's Health of the Atmosphere Program has been designed to provide an understanding of the impact of high ozone levels in rural areas where crop and forest damage are of increasing concern. With funding from this Program, the Air Resources Laboratory's Atmospheric Turbulence and Diffusion Division, located in Oak Ridge, Tennessee, is collaborating with University of Alabama in Huntsville scientists to develop better models and prediction of photochemical ozone production.